LISTING OF THE CLAIMS

CLAIMS

What is claimed is:

1. (previously presented) An information processing apparatus comprising means for creating a digest of a document a layout of which is determined, the document including a plurality of regions, each region including one or more display elements, the means for creating comprising:

    means for selecting the display elements based on display priorities of the display elements, and for deciding all of selected display elements as a display content of a digest screen under a condition where a total display area of all of the selected display elements does not exceed a required display area; and

    means for setting a merging relationship among the regions by deciding a merging region, with which a region not being displayed on the digest screen is merged, from among regions displayed on the digest screen based on layout information for the regions in the document, all of the regions being included in the document.

2. (Original) The information processing apparatus according to claim 1, further comprising means for deciding, as a display content of a detail screen, a region group including the regions displayed on the digest screen and the region merged with the displayed regions in response to that a detail display of the displayed regions is required.

3. (Original) The information processing apparatus according to claim 2, further comprising means for creating control information for controlling a display of the detail screen, wherein the means for deciding the display content of the detail screen creates a digest of the detail screen based on the control information when the region group is too large to fit in the required display area.

4. (Original) The information processing apparatus according to claim 1, wherein the means for deciding the display content of the digest screen further includes means for changing the display content of the digest screen based on an operation of a user.

5. (Original) The information processing apparatus according to claim 4, wherein the changing means includes means for automatically changing the display content of the digest screen, accompanying the operation of the user.

6. (previously presented) A server for creating a digest of a document a layout of which is determined, the server comprising means for transmitting information for creating the digest of the document the layout of which is determined to a client terminal together with the document, the server further comprising:

　　　means for obtaining display priorities of a plurality of display elements belonging to each of regions of the document based on attributes of the display elements; and

　　　means for creating layout information for the regions in the document.

7. (previously presented) The server according to claim 6,

　　　wherein the means for obtaining the display priorities further comprises

　　　means for arraying, for each of the regions, the display elements belonging to the regions in accordance with a predetermined criterion;

　　　means for obtaining a ratio of a cumulative length of each of the arrayed display elements in each of the regions by dividing the cumulative length by a total length of the region; and

　　　means for dividing the ratio of the cumulative length by a significance of the region to which the display element belongs, the ratio having been obtained for each of the display elements.

8. (Original) A method comprising creating a digest of a document a layout of which is determined, the document including a plurality of regions, each region including one or more display elements, the step of creating comprising the steps of:

selecting the display elements based on display priorities of the display elements, and for deciding all of selected display elements as a display content of a digest screen under a condition where a total display area of all of the selected display elements does not exceed a required display area; and

setting a merging relationship among the regions by deciding a merging region, with which a region not being displayed on the digest screen is merged, from among regions displayed on the digest screen based on layout information for the regions in the document, all of the regions being included in the document.

9. (Original) The method according to claim 8, further comprising the step of deciding, as a display content of a detail screen, a region group including the regions displayed on the digest screen and the region merged with the displayed regions in response to that a detail display of the displayed regions is required.

10. (Original) The method according to claim 9, further comprising the steps of: creating control information for controlling a display of the detail screen; and creating a digest of the detail screen based on the control information when the region group is too large to fit in the required display area.

11. (Original) The method according to claim 8, further comprising the step of changing the display content of the digest screen based on an operation of a user.

12. (previously presented) A program comprising code for creating a digest of a document a layout of which is determined, the document including a plurality of regions, each region including one or more display elements, the program allowing a computer to realize:

a function to select the display elements based on display priorities of the display elements, and to decide all of selected display elements as a display content of a digest screen under a condition where a total display area of all of the selected display elements does not exceed a required display area; and

a function to set a merging relationship among the regions by deciding a merging region, with which a region not being displayed on the digest screen is merged, from among regions displayed on the digest screen based on layout information for the regions in the document, all of the regions being included in the document.

13. (Original) The program according to claim 12, wherein the program further allows the computer to realize a function to decide, as a display content of a detail screen, a region group including the regions displayed on the digest screen and the region merged with the displayed regions in response to that a detail display of the displayed regions is required.

14. (Original) The program according to claim 13, wherein the program further allows the computer to realize: a function to create control information for controlling a display of the detail screen; and a function to create a digest of the detail screen based on the control information when the region group is too large to fit in the required display area.

15. (Original) The program according to claim 12, wherein the program further allows the computer to realize a function to change the display content of the digest screen based on an operation of a user.

16. (Original) A computer program product comprising a computer usable medium having computer readable program code means embodied therein for causing creation of a digest of a document a layout of which is determined, the computer readable program code means in said computer program product comprising computer readable program code means for causing a computer to effect the functions of claim 1.

17. (Original) A computer program product comprising a computer usable medium having computer readable program code means embodied therein for causing creation of a digest of a document a layout of which is determined, the computer readable program code means in said computer program product comprising computer readable program code means for causing a computer to effect the functions of claim 6.

18. (Original) An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing creation of a digest of a document a layout of which is determined, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 8.

19. (Original) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for creating a digest of a document a layout of which is determined, said method steps comprising the steps of claim 8.

20. (New) The information processing apparatus according to claim 1, further comprising at least one limitation taken from a group of limitations consisting of:

means for deciding, as a display content of a detail screen, a region group including regions displayed on a digest screen and a region merged with displayed regions in response to a detail display of the displayed regions is required;

means for creating control information for controlling a display of the detail screen, wherein the means for deciding the display content of the detail screen creates a digest of the detail screen based on the control information when the region group is too large to fit in the required display area;

wherein the means for deciding the display content of the digest screen further includes means for changing the display content of the digest screen based on an operation of a user;

wherein the changing means includes means for automatically changing the display content of the digest screen, accompanying the operation of the user;

means for transmitting information for creating the digest of the document the layout of which is determined to a client terminal together with the document;

means for obtaining display priorities of a plurality of display elements belonging to each of a plurality of regions of the document based on attributes of the display elements;

means for creating layout information for the regions in the document; and

wherein the means for obtaining the display priorities further comprises:

    means for arraying, for each of the regions, the display elements belonging to the regions in accordance with a predetermined criterion,

    means for obtaining a ratio of a cumulative length of each of the arrayed display elements in each of the regions by dividing the cumulative length by a total length of the region, and

    means for dividing the ratio of the cumulative length by a significance of the region to which the display element belongs, the ratio having been obtained for each of the display elements.